Introduced by Senator Kuehl

February 14, 2001

An act to amend Sections 114715, 114990, and 115060 of, to add Section 25150.7 to, and to add Chapter 10 (commencing with Section 115300) to Part 9 of Division 104 of the Health and Safety Code, the Health and Safety Code, and to amend Sections 40191, 43210, 43308, and 44103 of, and to add Section 43022.5 to, the Public Resources Code, relating to radiation.

LEGISLATIVE COUNSEL'S DIGEST

SB 243, as amended, Kuehl. Radiation Safety Act of 2001. Existing

(1) The existing hazardous waste control law prohibits any person from managing any hazardous waste, except as provided in that law, or in the regulations adopted by the Department of Toxic Substances Control. A violation of the hazardous waste control laws is a crime.

This bill would require the department to prohibit any radioactive waste from being transferred to, or received by, a hazardous waste disposal facility that is subject to this chapter. Since a violation of this prohibition would be a crime, the bill would impose a state-mandated local program.

(2) Existing law prohibits a person from burying, throwing away, or in any manner disposing of radioactive wastes within the state except in a manner and at locations that will result in no significant radioactive contamination of the environment. Existing law authorizes the State Department of Health Services, by written order, to prohibit the disposal of radioactive wastes by any person when, upon investigation,

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it has determined that the disposal violates existing provisions concerning radioactive contamination. Existing law authorizes the department, by written order, to prohibit the storage, packaging, transporting, or loading of radioactive wastes if there is a reasonable likelihood that the activities will result in significant radioactive contamination of the environment.

The existing Radiation Control Law requires the department, among other things, to issue licenses, and prohibits the department from issuing a license to receive radioactive material for disposal unless specified requirements are satisfied, including that the land on which the radioactive wastes are to be buried is owned by the federal or state government. Existing law also requires the department to develop an overall plan for the management, treatment, and disposal of low-level radioactive waste generated in California.

This bill would state the intent of the Legislature to do all of the following:

- (1) Prohibit shallow land burial of low-level radioactive waste and establish minimum qualifications for operators of low-level radioactive waste disposal facilities.
- (2) Require the separation of the highly dangerous and more benign substances in low-level radioactive waste, and authorize the department to design and license an engineered facility for the temporary storage or disposal of low-level radioactive wastes generated by medicine, academia, and biotechnology.
- (3) Require that all radioactive waste be disposed of in a facility licensed to receive radioactive waste.
- (4) Require that the disposal of radioactive waste, and the remediation of contaminated sites, meet the current goals of the federal Environmental Protection Agency limiting exposure to radioactivity to a prescribed degree.
- (5) Prohibit any site contaminated by radioactive waste from a nuclear reactor from being zoned for residential use.

This bill would enact the Radiation Safety Act of 2001 and would require any license issued pursuant to the Radiation Control Law by the department pursuant to that law to also comply with the requirements of the Radiation Safety Act of 2001.

The bill would prohibit any person from burying, throwing away, or disposing of radioactive wastes within the state except in a disposal facility specifically licensed for that kind of radioactive waste.

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The bill would prohibit any generator or owner of radioactive waste from disposing of radioactive material or waste, disposing of, or transmitting to any person or entity for disposal, any material containing byproduct, source, or special nuclear material, or disposing of naturally occurring radioactive material, except at a specified licensed facility. The bill would also prohibit any person from transferring a radioactive item, containing radioactive contamination, to a person for reuse who is not licensed, or transferring or delivering any radioactive material to a person not possessing a license or permit specifically authorized to possess that radioactive material.

The bill would prohibit any person from selling, transferring, or leasing a site, soil, or structure with residual radioactive contamination for any subsequent land use until the contamination has been removed and transferred to a licensed disposal facility, except as specified. The bill would require any person subject to this prohibition to use thorough and rigorous monitoring of the site, soil, and structures involved, using best available techniques, equipment, and methodology to provide high assurance that any residual contamination will be identified and to remove any contamination at levels above background, except as specified. The bill would provide that if the department allows any residual radioactivity to remain at a site, soil, or structure, the person would be required to include a perpetual deed restriction for the property of that site, soil, or structure.

The bill would exclude, from the Radiation Safety Act of 2001, specified material and activities, including the reuse or recycling of a radioactive item by an unlicensed federal entity, to the extent the item remains on the property, and under the control, of the federal entity.

(3) The existing California Integrated Waste Management Act of 1989 requires the California Integrated Waste Management Board to adopt and review regulations setting forth standards for solid waste handling. The term "solid waste" is defined, for the purpose of the act, as excluding radioactive waste regulated pursuant to the Radiation Control Law and the board has no enforcement or regulatory authority with regard to a facility that accepts low-level radioactive waste.

This bill would revise that definition of solid waste and would authorize the board to adopt and enforce standards to prohibit any radioactive waste from being transferred to, or received by, a solid waste disposal facility that is subject to that act. The bill would also make conforming changes to provisions specifying the authority of the SB 243 — 4—

board and the Department of Toxic Substances Control with regard to the regulation of low-level radioactive waste.

- (4) The bill would declare that the provisions of the bill are severable and if any provision of the bill or its application is held invalid, that invalidity would not affect other provisions or applications that can be given effect without the invalid provision or application.
- (5) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: no yes. State-mandated local program: no yes.

The people of the State of California do enact as follows:

- 1 SECTION 1. Section 25150.7 is added to the Health and 2 Safety Code, to read:
- 3 25150.7. (a) For purposes of this section, "radioactive waste" has the same meaning as defined in Section 115301.
- 5 (b) Notwithstanding any other provision of law, the department 6 shall prohibit any radioactive waste from being transferred to, or 7 received by, a hazardous waste disposal facility that is subject to 8 this chapter.
- 9 SEC. 2. Section 114715 of the Health and Safety Code is 10 amended to read:
- 11 114715. No person shall bury, throw away, or in any manner dispose of radioactive wastes within the state except in a manner and at locations as will result in no significant radioactive contamination of the environment in a disposal facility specifically licensed or permitted to dispose that kind of radioactive waste.
- 17 SEC. 3. Section 115060 of the Health and Safety Code is 18 amended to read:
- 19 115060. (a) The department shall provide by rule or regulation for general or specific licensing of persons to receive,
- 21 possess, or transfer radioactive materials, or devices or equipment
- 22 utilizing these materials. That rule or regulation shall provide for
- 23 amendment, suspension, or revocation of licenses.

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(b) The department may require registration and inspection of sources of ionizing radiation other than those that require a specific license, and compliance with specific safety standards to be adopted by the department.

(e) The department may exempt certain sources of ionizing radiation or kinds of uses or users from the licensing or registration requirements set forth in this section when the department makes a finding that the exemption of these sources of ionizing radiation or kinds of uses or users will not constitute a significant risk to the health and safety of the public.

(d)

(c) Regulations adopted pursuant to this chapter may provide for recognition of other state or federal licenses as the department may deem desirable, subject to registration requirements as the department may prescribe.

(e)

- (d) The department shall adopt registration and certification regulations for mammography equipment. These regulations shall include, but not be limited to, all of the following requirements:
- (1) An X-ray machine used for mammography shall be specifically designed for mammography and inspected by the department, or deemed satisfactory by the department based upon evidence of certification by the American College of Radiology mammography accreditation program, or an accreditation program that the department deems equivalent before it is certified.
- (2) That all persons who have a certificate for mammography equipment follow a quality assurance program to be adopted by the department to ensure the protection of the public health and safety.
- (3) That quality assurance tests, as determined by the department, are performed on all mammography equipment located in a mobile van or unit after each relocation of the mobile van or unit to a different location for the purpose of providing mammography. This equipment shall be recalibrated if images are not of diagnostic quality as determined by the department. A written record of the location of mobile vans or units with dates and times shall be maintained and available for inspection by the department.
- (4) On or after July 15, 1993, all mammography equipment shall be registered with and certified by the department. If this

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mammography equipment is certified by a private accreditation organization, the department shall take into consideration evidence of this private certification when deciding to issue a mammogram certification.

(5) All licenses, permits, and certificates issued by the department pursuant to this chapter and the Radiologic Technology Act (Section 27) relating to the use of mammography equipment shall be publicly posted pursuant to this section and regulations adopted by the department.

(f)

- (e) To further ensure the quality of mammograms, the department shall require all mammogram facilities, other than mobile units or vans, to operate quickly and efficiently so as to ensure that the facilities are able to develop mammograms of diagnostic quality prior to when the patient leaves the facility.
- SEC. 4. Section 114990 of the Health and Safety Code is amended to read:
- 114990. The (a) Except as provided in subdivision (b), the department is designated as the agency responsible for the issuance of licenses. In carrying out its duties under this section, the department may enter into an agreement with the Division of Occupational Safety and Health and other state and local agencies to conduct technical evaluations of license applications prior to issuance of licenses. The agreements shall also include provisions for conducting inspections in accordance with Section 115095.
- (b) Any license issued by the department pursuant to this chapter shall also comply with the requirements of Chapter 10 (commencing with Section 115300).
- SEC. 5. Chapter 10 (commencing with Section 115300) is added to Part 9 of Division 104 of the Health and Safety Code, to read:

Chapter 10. Radiation Safety Act of 2001

 115300. This chapter shall be known and may be cited as the Radiation Safety Act of 2001.

115301. (a) The Legislature finds and declares that the practice of disposing of low-level radioactive waste in shallow trenches has proven to be unsafe in numerous locations throughout the country.

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(b) It is the intent of the Legislature to prohibit shallow land burial of low-level radioactive waste and establish minimum qualifications for operators of low-level radioactive waste disposal facilities.

- 115302. (a) The Legislature finds and declares that low-level radioactive waste includes highly dangerous substances as well as more benign substances such as those used in medicine, academic research, and biotechnology.
- (b) It is the intent of the Legislature to separate the waste streams and authorize the State Department of Health Services to design and license an engineered facility for the temporary storage or disposal of low-level radioactive wastes generated by medicine, academia, and biotechnology.
- 115303. (a) The Legislature finds and declares that the proposed policy of the State Department of Health Services to deregulate certain radioactive waste would inadequately protect the public health.
- (b) It is the intent of the Legislature to require that all radioactive waste be disposed of in a facility licensed to receive radioactive waste, and to require that the disposal of all radioactive waste, and the remediation of all sites contaminated with radioactivity, meet the current goals of the federal Environmental Protection Agency limiting exposure to radioactivity to the extent that it will cause no more than one additional fatal cancer in one out of every million people.
- 115304. (a) The Legislature finds and declares that the National Academy of Sciences has determined that restrictions on the use of property contaminated by radioactivity intended to protect the public from radiation exposure will not last as long as many radioactive substances remain dangerous, which may be hundreds of thousands of years.
- (b) It is the intent of the Legislature to prohibit any site contaminated by radioactive waste from a nuclear reactor from being zoned for residential use.
- 115301. For purposes of this chapter, the following definitions shall apply:
- (a) "Background" means the local level of radioactivity from nature of like materials without enhancement by human activity, plus the local levels of fallout from nuclear weapons testing and the local deposition of fallout from past nuclear accidents located

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l elsewhere in the world, including, but not limited to, the nuclear accident in Chernobyl.

- (b) "Low-level radioactive waste," has the same meaning as defined in subdivision (m) of Section 114985, but also includes byproduct, source, or special nuclear materials as defined in subdivision (k), whether produced by a licensed or unlicensed entity.
- (c) "NORM" means Naturally Occurring Radioactive Material.
- (d) "Radioactive waste" means any discarded radioactive material with radioactivity above the background level when measured with the best available technology.
- (e) "Radioactive material" includes, but is not limited to, all of the following:
- (1) Byproduct material, as defined in Sections 2014(e)(1) and 2014(e)(2) of the Atomic Energy Act of 1954 (42 U.S.C. Sec. 2014 and following).
- (2) Source and special nuclear material as defined in subdivisions (e) and (f) of Section 114985.
 - (3) *NORM*.
- (4) Wastes from the Formerly Utilized Sites Remedial Action Program operated by the United States Army Corps of Engineers (FUSRAP), irrespective of when and where the wastes were generated.
- 115302. (a) (1) No generator or owner of radioactive waste shall dispose of, or transmit to any person or entity for disposal, radioactive material or waste in this state, except in a facility possessing a specific license or permit issued pursuant to Chapter 8 (commencing with Section 114960) to dispose of that particular type and amount of radioactive waste.
- (2) No generator or owner of radioactive waste shall dispose of, or transmit to any person or entity for disposal, any material containing byproduct, source, or special nuclear material in this state except at a facility possessing a specific license, as defined in subdivision (h) of Section 114960, to dispose of byproduct, source, or special nuclear material in accordance with a permit issued pursuant to Chapter 8 (commencing with Section 114960).
- 38 (3) No person shall dispose of NORM in California except at 39 a facility possessing a specific license or permit to dispose of 40 NORM waste.

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(b) No person shall recycle radioactive material, or material containing radioactive contamination in the state, so that the radioactivity is transferred or delivered to an unlicensed person.

- (c) No person may transfer a radioactive item, or item containing radioactive contamination, to a person for reuse who is not licensed pursuant to Chapter 8 (commencing with Section 114960).
- (d) No radioactive material may be transferred or delivered to a person not possessing a license or permit specifically authorizing possession of that radioactive material pursuant to Chapter 8 (commencing with Section 114960).
- (e) With regard to any material that is subject to this section, there shall be a rebuttable presumption that the material is contaminated and the person handling the material shall bear the burden of proof to demonstrate, with high confidence, that the material is not contaminated.
- 115303. (a) Except as provided in subdivision (b), no person shall sell, transfer, or lease a site, soil, or structure with residual radioactive contamination for any subsequent land use, until the contamination has been removed pursuant to subdivision (c) and transferred to a disposal facility specifically licensed or permitted for that type of radioactive waste pursuant to Chapter 8 (commencing with Section 114960).
- (b) A person may sell, transfer, or lease a site, soil, or structure with residual radioactive contamination if the department determines that the remaining risk to a member of the public from that residual radioactivity would not exceed a one in a million risk of cancer or any other serious health effect. In calculating risk for this subdivision, the department shall use the most restrictive potential land use, based on the premise that any land use restriction may eventually fail. When more than one generally accepted model or technique is available, the department shall use the model or technique that generally leads to the most protective outcome.
- (c) Any person subject to this section shall use thorough and rigorous monitoring of the site, soil, and structures involved, using best available techniques, equipment, and methodology, to provide a high assurance that any residual contamination shall be identified. The person shall remove any contamination at a level above background, or, if the alternative remediation method

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specified in subdivision (b) is chosen, above the one in a million risk level, and the amount of contamination shall be removed without averaging over any larger area.

- (d) If the department allows any residual radioactivity to remain at a site, soil, or structure pursuant to this section, the person subject to this section shall include a perpetual deed restriction for the property of that site, soil, or structure that identifies, in detail, the location, nature, type, and concentration and amount of radioactivity and contaminated materials, and that bars, in perpetuity the transfer offsite of that contaminated material to a facility that is not specifically licensed or permitted pursuant to Chapter 8 (commencing with Section 114960).
- (e) With regard to any site, soil, or structure that is subject to this section, there shall be a rebuttable presumption that the site, soil, or structure is contaminated, and the person handling the material shall bear the burden of proof to demonstrate, with high confidence, that the site, soil, or structure is not contaminated.

115304. This chapter does not apply to any of the following materials or activities:

- (a) Short-lived radioactive materials of the type that are commonly used in medicine, biotechnology, and academia, that are at the end of their storage-to-decay period, and that are managed by an approved storage-to-decay program, including an onsite facility or a centralized facility.
- (b) Liquid and gaseous radioactive effluents and releases to sanitary sewers, of the types, amounts, and concentrations specified in the regulations adopted by the Nuclear Regulatory Commission or the department.
- (c) Scintillation liquids from research and animal tissues containing the amounts of tritium and carbon-14 specified in Section 20.2005 of Title 10 of the Code of Federal Regulations, as that section read on January 1, 2001.
- (d) The technetium-99 associated with molybdenum-99 radioisotope generators of the type used in medicine.
- (e) Radioactive materials intentionally inserted into products for their radioactive purpose and that are specifically exempted by the Nuclear Regulatory Commission from Part 30 (commencing with Section 30.1) and Part 40 (commencing with Section 40.1) of Title 10 of the Code of Federal Regulations, as those regulations

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1 read on the date of enactment of the Energy Policy Act of 1992 (C.P.L. 102-486).

- (f) The reuse or recycle of a radioactively contaminated item by a person licensed to possess that item, to the extent that the item remains on the licensed site and is subject to regulatory control of its onsite use, but does include the transfer of that item for recycle or reuse by, or to, a person who does not possess a license to possess that item or to any other person.
- (g) The reuse or recycle of a radioactive item by an unlicensed federal entity to the extent the item remains on the property of the federal entity and under its control.
- SEC. 6. Section 40191 of the Public Resources Code is amended to read:
- 40191. (a) Except as provided in subdivision (b), "solid waste" means all putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, dewatered, treated, or chemically fixed sewage sludge—which that is not hazardous waste, manure, vegetable or animal solid and semisolid wastes, and other discarded solid and semisolid wastes.
- (b) "Solid waste" does not include any of the following wastes:
 - (1) Hazardous waste, as defined in Section 40141.
- (2) Radioactive Except as provided in Section 43022.5, radioactive waste regulated pursuant to the Radiation Control Law (Chapter 8 (commencing with Section 114960) of Part 9 of Division 104 of the Health and Safety Code).
- (3) Medical waste regulated pursuant to the Medical Waste Management Act (Part 14 (commencing with Section 117600) of Division 104 of the Health and Safety Code). Untreated medical waste shall not be disposed of in a solid waste landfill, as defined in Section 40195.1. Medical waste that has been treated and deemed to be solid waste shall be regulated pursuant to this division.
- 37 SEC. 7. Section 43022.5 is added to the Public Resources 38 Code, to read:

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1 43022.5. (a) For purposes of this section, "radioactive 2 waste" has the same meaning as defined in Section 115301 of the 3 Health and Safety Code.

- (b) Notwithstanding any other provision of law, the board may adopt and enforce standards to prohibit any radioactive waste from being transferred to, or received by, a solid waste disposal facility that is subject to this division.
- SEC. 8. Section 43210 of the Public Resources Code is amended to read:
- 9 43210. For Except as provided in Section 43022.5, for those 10 11 facilities that accept only hazardous wastes, or accept only low-level radioactive wastes, or facilities that accept only both, 12 13 and to which Chapter 6.5 (commencing with Section 25100) of 14 Division 20 or Chapter 8 (commencing with Section 114960) of Part 9 of Division 104 of the Health and Safety Code applies, the 15 board and the enforcement agency have no enforcement or 16 regulatory authority. All enforcement activities for the facilities 17 relative to the control of hazardous wastes shall be performed by 19 the Department of Toxic Substances Control pursuant to Article 8 20 (commencing with Section 25180) of Chapter 6.5 of Division 20 21 of the Health and Safety Code, and all enforcement activities 22 relative to the control of low-level radioactive waste shall be 23 performed by the State Department of Health Services pursuant to 24 Chapter 8 (commencing with Section 114960) of Part 9 of Division 104 of the Health and Safety Code, except as provided 25 26 in Section 43022.5 and in Section 25150.2 of the Health and Safety 27 Code.
- 28 SEC. 9. Section 43308 of the Public Resources Code is 29 amended to read:
- 43308. For Except as provided in Section 43022.5, those 30 31 facilities that accept only hazardous wastes and to which Chapter 6.5 (commencing with Section 25100) of Division 20 of the Health 32 33 and Safety Code applies, or that accept only low-level radioactive 34 wastes and to which Chapter 8 (commencing with Section 114960) of Part 9 of Division 104 of the Health and Safety Code applies, 35 or for those facilities that accept both, the board shall have no 36 37 enforcement or regulatory authority. Except as otherwise provided in Section 40052, all enforcement activities for those facilities 38 relative to the control of hazardous wastes shall be performed by 40 the Department of Toxic Substances Control pursuant to Article 8

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1 (commencing with Section 25180) of Chapter 6.5 of Division 20 of the Health and Safety Code, and all enforcement activities for those facilities relative to low-level radioactive wastes shall be performed by the State Department of Health Services pursuant to Chapter 8 (commencing with Section 114960) of Part 9 of Division 104 of the Health and Safety Code, except as provided in Section 43022.5 and in Section 25150.2 of the Health and Safety Code.

SEC. 10. Section 44103 of the Public Resources Code is amended to read:

- 44103. (a) For Except as provided in Section 43022.5 for those facilities that accept only hazardous wastes, or that accept only low-level radioactive wastes, or that accept both, a solid waste facilities permit issued by the enforcement agency is not required. A single hazardous waste facilities permit or low-level radioactive waste facilities permit issued by the Department of Toxic Substances Control pursuant to Article 9 (commencing with Section 25200) of Chapter 6.5 of Division 20 of the Health and Safety Code, or by the State Department of Health Services pursuant to Chapter 8 (commencing with Section 114960) of Part 9 of Division 104 of the Health and Safety Code shall be the only waste facilities permit or permits necessary for the use and operation of hazardous waste or low-level radioactive waste disposal facilities, except as provided in Section 43022.5 and in Section 25150.2 of the Health and Safety Code.
- (b) For those facilities that accept both hazardous wastes and other solid wastes, two permits shall be required, as follows:
- (1) The hazardous waste facilities permit issued by the Department of Toxic Substances Control pursuant to Article 9 (commencing with Section 25200) of Chapter 6.5 of Division 20 of the Health and Safety Code.
- (2) The solid waste facilities permit issued by the enforcement agency pursuant to this chapter.
- (c) Nothing in this section limits or supersedes any other permit or licensing requirements imposed by other provisions of law.
- 36 SEC. 11. The provisions of this act are severable. If any 37 provision of this act or its application is held invalid, that 38 invalidity shall not affect other provisions or applications that can 39 be given effect without the invalid provision or application.

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SEC. 12. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.